WESTSIDE SALEM INTEGRATED NON-NATIVE PLANT MANAGEMENT PLAN

Final Decision and Decision Rationale

Environmental Assessment Number OR080-06-09

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United States Department of the Interior
Bureau of Land Management
Oregon State Office
Salem District
Marys Peak Resource Area
Tillamook Resource Area

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As the Nation's principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/PL-08/036+1792

I. INTRODUCTION

This project area is located on federal lands (approximately 232,332 acres) managed by the Marys Peak (MP) and Tillamook Resource Areas (RAs), Salem District BLM (Bureau of Land Management) and private lands located within the boundaries of these resource areas located west of the Willamette Valley, Oregon in Benton, Clatsop, Columbia, Lane, Lincoln, Multnomah, Polk, Tillamook, Washington, and Yamhill counties. The project area only includes private lands where federal dollars are providing funding for the treatment of non-native plant (NNP) species and generally requires both parties to enter into a partnership or cost share agreement.

The BLM has conducted an environmental assessment (EA), documented in the *Westside Salem Integrated Non-Native Plant Management Plan Environmental Assessment* (EA # OR080-06-09). The proposed project will implement a long term integrated weed management plan to reduce and control NNP species across the MP and Tillamook RAs. It includes cultural, physical, biological and chemical control of NNPs in a variety of habitats within LSR (Late-Successional Reserve), RR (Riparian Reserve), AMA (Adaptive Management Area), Matrix LUAs (Land Use Allocations) and ACECs (Areas of Critical and Environmental Concern). Chemical use will be limited to the BLM-approved herbicide glyphosate. Herbicides will only be utilized for control of ODA (Oregon Department of Agriculture) NNP species designated as "noxious" when all other control methods were identified as not practical (see EA OR080-06-09, Appendix 5, p. 81 for a list of ODA listed noxious weeds).

Implementation of the proposed action will conform to management actions and direction contained in the attached Westside Salem Integrated NNP Management Plan EA (*Westside Salem Integrated Non-Native Plant Management Plan Environmental Assessment*). The Westside Integrated NNP Management Plan EA and FONSI (Finding of No Significant Impact) are incorporated by reference in this determination.

The EA is a programmatic analysis of the MP and Tillamook RAs and supplements analyses found in the *RMP/FEIS* (*Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994) (EA p. 1). The Westside Salem Integrated NNP Management Plan project has been designed to conform to the ROD/RMP (*Salem District Record of Decision and Resource Management Plan*, May 1995) and related documents which direct and provide the legal framework for BLM managed lands within MP and Tillamook RAs (EA pp. 1-2). Consultation with U.S. Fish and Wildlife Service and NOAA (National Oceanic and Atmospheric Administration) NMFS (National Marine Fisheries Service) is described in Section 7.1 of the EA.

A FONSI was signed on January 16, 2008 and the EA and FONSI were then made available for public review.

The decision documented in this Decision Rationale (DR) is based on the analysis documented in the EA.

II. DECISION

We have decided to implement the Westside Salem Integrated Non-Native Plant Management Plan as described in Alternative 2 (EA # OR080-06-09, pages 5-14) with modifications described below, hereafter referred to as the "selected action". The decision is based on analysis in the Westside Salem Integrated Non-Native Plant Management Plan EA. This decision is based on site-specific analysis in

the Westside *Salem Integrated Non-Native Plant Management Plan EA* (EA # OR080-06-09), the supporting project record, and as the management direction contained in the *Salem District Record of Decision/Resource Management Plan* (ROD\RMP) (May 1995), which are incorporated by reference in the EA.

The selected action involves control of NNP species through the use of; 1) Cultural control methods such as education, prevention and grazing, 2) Physical treatments such as; pulling, mowing, slashing, lopping, chopping or burning, 3) Biological control will only be accomplished by releasing animals (insects, spiders, mites etc.) or pathogens approved by the ODA, and 4) Chemical treatments will entail the application of the herbicide glyphosate by selective or spot application (hand treatments).

Broadcast spraying of herbicides such as using vehicle mounted booms or helicopter for aerial spraying will not be allowed under this proposal. After treating areas infested with NNP, native species will be established by one or both of the following methods depending on the size of the area to be treated: 1) Passive establishment- where native species within the treatment area can become re-establish without the aid of additional sowing or planting, and 2) Active Establishment- where native species are sown or planted within the treatment areas to aid in the re-establishment of native species.

Changes to the EA

The EA included the following design feature (p. 12):

> Spot application using aquatic labeled glyphosate will be allowed to waters edge. However, application on plants growing in dry portions of a stream channel will be limited to the ODFW preferred in-water work period for each watershed. No herbicides will be applied to submersed or floating vegetation or open water.

This design feature was based on language described on page 35 of the *Biological Assessment for USDA Forest Service (Pacific Northwest Region), and USDI Bureau of Land Management (Oregon State Office), and the Coquille Indian Tribe Fish Habitat Restoration Activities Affecting ESA and MSA-Listed Animal and Plant Species Found in Oregon and Washington* (December 12, 2006).

The Biological Opinion from the National Marine Fisheries Service *Endangered Species Act Section 7 Formal Programmatic Consultation and Manguson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-2012 (April 28, 2007)* design criteria on pages 24 and 25 of the introduction section includes the following design criteria for herbicide use which restricts the use of aquatic glyphosate:

> 1) Spot spray: i) spot spray of aquatic glyphosate allowed to bankfull level. Hand held spray application (no backpack sprayers) of aquatic glyphosate allowed within intermittent or ephemeral channels, and ii) Hand held spray application (no backpack spray) of aquatic glyphosate to 15 feet of waters' edge in perennial channels.
>
> 2) Wicking and Wiping: Application with aquatic glyphosate allowed to the waters edge.
>
> 3) Cut-stump and Hack and Squirt: Application with aquatic glyphosate allowed to waters' edge.

In order to meet ESA obligation when a fisheries 'may affect' determination is made within the project area the Westside Salem Integrated Non-Native Plant Management Plan will conform to the design criteria described in the 2007 Biological Opinion rather than the design criteria described in the EA and BA. For actions determined to be 'no effect' the project will conform to those design features described in the EA and BA.

Decision Summary:

The selected action will implement a long term Integrated NNP Management Plan to reduce and control NNP species on federal and non-federal lands in the MP and Tillamook RAs within Benton, Clatsop, Columbia, Lane, Lincoln, Multnomah, Polk, Tillamook, Washington and Yamhill Counties. The Westside Salem BLM will support and enter into cooperative agreements proposed by federal and/or non-federal groups while utilizing federal dollars for the control of NNPs on both federal and non-federal lands. This plan will include cultural, physical, biological and chemical control of NNP species in a variety of habitats and occur in any LUA including but not limited to the following; ACEC, RR, LSR, AMA and Matrix. This plan will also include control of NNP species on private lands where funded by federal dollars. The project will be consistent with supporting public land objectives, cumulative benefits, and healthy watersheds.

Biological and chemical controls may be used where the application of physical treatments are not sufficient, practicable or economical. Herbicide treatments will only occur on NNPs designated by the ODA as 'noxious weeds' and generally will occur after physical control methods are utilized to reduce vegetative mass.

All treatments will be implemented in accordance with the design features provided in the Weed Control EIS/ROD, Weed Control FSEIS, RMP/FEIS, RMP and those listed in section 2.3.3 of the EA (see DR Table 2).

Area of Treatment:

Although the number of acres treated annually will be based on available funding, weather, and condition of the NNP sites, physical treatments will occur on up to 1,500 acres per year (0.65% of Westside Salem BLM managed lands). Herbicide use will be limited to 100 acres per year (0.04% of the public lands in the project area) and restricted to whatever is less: 1) 10 acres per year, per 6th field watershed or 2) less than 10% of the total riparian area within each 6th field per year. The 1,500 acre annual physical treatment limit and the 100 acre annual herbicide limit will be the sum of all treatments on BLM managed lands and all private lands utilizing Federal dollars, excluding those project areas listed in EA Appendix 6.

Use of Cultural Treatments

Cultural practices are land management decisions which incorporate preventative design features into a project to prevent or limit the spread of non-native species. These include: prevention, wildlife management, grazing, road closures and restrictions, development of rock source management plans, cleaning of vehicles, minimizing soil disturbances and re-planting with native vegetation.

Use of Physical Treatments

This is the preferred method of treatment for existing infestations of NNPs. Physical treatment will be utilized by itself or in combination with biological and chemical treatments. Following physical treatment, the project area will be assessed for the need to reduce NNP debris through the use of fire. Physical treatments include manual, mechanical, and burning treatments.

Use of Biological Controls
Biological controls will be utilized when available and in accordance with the ODA guidelines. This method will be utilized on landscape scale infestations where control methods using physical, mechanical or chemical control are not feasible. These treatments include using known competitors such as insects and pathogens from the native lands of the NNP that has become established in western Oregon.

Use of Herbicides
In general, herbicide use will be utilized after physical treatments or used as an initial treatment in areas where physical treatments are not feasible, effective, or in areas where physical treatments will disturb too much soil

Maximum application rate of glyphosate will be whichever is less, 1) BLM approved glyphosate rate per acre, or 2) rate of application as indicated on the label (See EA Appendix 3 for information regarding glyphosate). Proposed use of other herbicides will require additional separate NEPA documentation (EA or EIS). Chemical use will be restricted to NNP species designated by ODA as "noxious weeds" (See EA Appendix 5 for a current list of ODA listed noxious weeds). Application of glyphosate will only be allowed by injection, wiping, wicking or (spot application) spraying. Aerial applications and vehicular spraying with booms will not be allowed. All herbicide application will be applied by Oregon certified applicators or by applicators under the direct supervision of an Oregon certified applicator. All herbicide applications will comply with label instructions and may be further restricted by design features listed below. In the majority of cases, prior to the use of herbicides, the non-native vegetative volume will be reduced through physical treatments.

Table 1: Description of Control Methods

Control Method	Treatment Type	Description
Cultural Treatments	Grazing	Non-native vegetation will be controlled through the use of grazing practices.
	Education and Prevention	Promote NNP education and prevention. This may include; managing wildlife and/or grazing activities, preparing road management guidelines which may incorporate road closures, road restrictions, development of rock source management plans and education of minimizing transportation of noxious weeds through vehicle use. Prevention may include minimizing soil disturbances and re-plant with native vegetation according to BLM policies.
Physical Treatments	Hand pulling	Uprooting is performed either by hand or using hand (non-motorized) tools. Generally appropriate for non-rhizomatous forming, tap-rooted species and/or species which reproduce only from seed. Treatment is preferred when plant growth stage and soil conditions allow, and prior to seed-set for annual species. Hand pulling of emergent invasive plants is included.
	Seed Source Removal	Fruiting structures are cut, bagged, and removed from the area. The remainder of plant is left intact but may be treated with another method.
	Stabbing	Some plants can be severely weakened or killed by severing or

Control Method	Treatment Type	Description
		injuring the carbohydrate storage structure (corm, rhizome, taproot etc.) at the base of the plant. This can generally be accomplished with a shovel or hoe.
	Girdling	A strip of bark (including the cambium) is removed around the base of woody species.
	Cutting/Mowing	Removal of the above-ground portion of a plant by cutting with; chainsaws, handsaw, pruning shears, string or blade trimmers, other hand tools, push tractor mounted mower.
	Solarization	Non-native vegetation may be covered with plastic, geotextile, cardboard, or other material to kill the plant or reduce plant vigor prior to treatment with another method.
	Burning	Non-native vegetation will be treated with a variety of ignition devices such as propane torches, other gas burning torches, or drip torches. A combination of piling or broadcast burning may occur.
Biological Control	Bio control	Biological control is the inoculation of an infestation site with insects, parasites, or pathogens that specifically target the invasive plant species of concern. Treatment of invasive plant infestations with biological controls is a gradual process requiring several years to reach full effectiveness. Subsequent treatment with other methods may also occur.
Herbicide Treatments	Stem Injection	Stems of actively growing species with a stem diameter larger than ½ inch are injected with herbicide usually near the base of the plant. Where stems are less than ½ inch stems may be severed and injected through the stem nodes.
	Cut-Stump	Herbicide is applied by spray, squirt, or wicking/wiping to the stump of a plant (usually a shrub or tree) shortly after the shoot or trunk is cut down.
	Wick & Wiping	Use a sponge or wick to wipe herbicide onto foliage, stems, or trunk. Use of wicking/wiping method reduces the possibility affecting non-target plants.
	Spot Application	Herbicide is directly sprayed onto target plants only, and spraying of desirable, non-target vegetation is avoided. Includes backpack and hand-pumped spray or squirt bottles, which can target very small plants or parts of plants (foliage, stems, or trunk).
	Hack & Squirt	Woody species are cut using a saw or axe or drilled; herbicide is then immediately applied to the cut with a backpack sprayer, squirt bottle, syringe, or similar equipment.
	Aerial and boom applications	Any herbicide application using aircraft, helicopters or other motorized vehicles using boom mounted sprayers. These application methods are restricted under this EA.

Priorities for Treatment:

Inventories will be conducted within the MP and Tillamook RAs to identify new NNP infestations and to monitor the spread of known infestations. Inventories will identify NNP sites needing treatment. Control efforts can be prioritized into three categories.

Priority 1

Eradication of ODA classified 'A' noxious weeds which generally occur in small enough numbers to make eradication or containment possible and noxious weeds classified as 'T' (target) noxious weeds by ODA. Control of NNPs that are located within special management areas such as; recreation areas, ACECs, wild and scenic rivers, wetlands or areas designated as scenic by-ways and NNP locations where bureau special status plants, fungi or animals will be considered as a Priority 1. Any new

invader species where a rapid response is needed for eradication will also be considered as a Priority 1 species. Herbicide treatments to noxious weed infestations previously treated with physical control methods will also be considered as Priority 1 treatment areas (See EA Appendix 6 for a list of sites currently proposed as Priority 1 for herbicide use).

Priority 2

Eradication of ODA classified 'B' noxious weeds which are regionally abundant, but may have limited distribution in some counties of Oregon and eradication of other NNP species that are of concern.

Priority 3

Eradication of NNP species which are not designated by the ODA (as noxious), and not occurring in special management areas.

Monitoring:

Treated sites will generally receive short and long-term monitoring to determine effectiveness of meeting treatment objectives, impacts on non-target species, and to determine the need for follow-up treatments. Monitoring will also allow for the early detection of new invader species.

Project Design Features:

Table 2 is a summary of the design features that reduce the risk of effects to the affected elements of the environment described in EA section 3.2 and modified as stated in changes to the EA on pp 4-5.

Table 2: Summary of Methods and Project Design Criteria

Design Features	Description
Features common to all treatment methods-	¦ Special Management Areas and Areas of Critical and Environmental Concern treatment strategies will be in accordance with direction established in specific management plans. The Nestucca River in Tillamook is a State Designated Wild and Scenic River but has not been federally designated. ¦ On Federal lands; evaluate proposed treatment areas to determine if there are any bureau special status wildlife, botanical and fungal species present that could be affected by the selected action. If any of these species are located in a proposed treatment area the known sites will be protected in compliance with bureau policy. The resource areas will consult or conference, as appropriate, with the U.S. Fish and Wildlife Service on any proposed action that may affect a listed or proposed. ¦ On non-Federal lands appropriate NEPA compliance such as a Determination of NEPA Adequacy (DNA) will be completed by BLM personnel. ¦ The project area will be evaluated for impacts to VRM quality prior to implementation and mitigation measures will be incorporated into the project design to protect VRM values. ¦ The Resource Area Biologist and/or Botanist will be notified if any bureau special status plant, animal or fungi species are found occupying sites proposed for treatment during project activities. All known sites will be protected according to bureau policies. ¦ Activities in any sensitive areas for wildlife will be seasonally restricted. ¦ Site management of bureau Special Status wildlife, botanical and fungal species will be accomplished in accordance with bureau policies. ¦ The resource area fisheries biologist, hydrologist and soil scientist shall be involved in all project designs located within riparian areas to ensure protection of aquatic and riparian habitats. In some instances a buffer may be applied to protect streams as determined by the resource area specialists.

Design Features	Description
	¦ Survey techniques for cultural resources will be based on those described in the Protocol for Managing Cultural Resource on Lands Administered by the Bureau of Land Management in Oregon. A post-project survey will be conducted according to standards based in the Protocol Appendix A or Appendix. Ground disturbing work will be suspended if cultural material is discovered during project work until an archaeologist can assess the significance of the discovery. ¦ Use the least ground disturbing method that results in effective invasive plant treatment. Utilize manual control methods over mechanical methods to minimize soil disturbances where possible (e.g. shovel vs. rototiller). ¦ In riparian zones minimize soil disturbance to prevent adverse affects to stream channel or water quality conditions. ¦ Transport no more than a one day supply of fuel for mechanical tools (chainsaws, string-trimmers, mowers etc.). ¦ Any treatments using heavy equipment off road will be restricted to the 'dry' season as determined by the soils biologist or hydrologist. ¦ Fueling of chainsaws and string-trimmers will not occur within 100 feet of surface waters ¦ Treatments within Nelsons Checkermallow (*Sidalcea nelsoniana*) known sites will only be accomplished in compliance with the USFWS recovery plan.
Cultural Treatments- Grazing	¦ An experienced soils scientist and/or hydrologist and fisheries biologist shall be involved in designing any proposed grazing treatments. Design features will provide a minimum 25 feet buffer from all aquatic systems. Fisheries review/approval will be needed for ESA (Endangered Species Act) EFH (Essential Fish Habitat) compliance.
Physical Treatments- General criteria common to all treatments.	¦ Minimize ground disturbance by treating only the area necessary for NNP eradication. ¦ Manual and/or mechanical methods of treatment will be implemented where possible to reduce NNP densities within the project area prior to initiating the use of herbicides or prescribed fire. ¦ Lopping and scattering or piling of NNP debris will be incorporated in areas with dense non-native vegetation. Pullback of fuels will be incorporated along roads and private property lines when the treatment area will be burned. ¦ Slash piles will be located away from stream channels as determined by the resource area hydrologist or fisheries biologist.
Physical Treatments- Mechanical	¦ Track mounted or rubber tired machinery will not be used outside the road prism within riparian areas. ¦ The selected action will be expected to be implemented consistent with design standards found in the USFWS's biannual Biological Opinion and Letter of Concurrence for activities that may disturb listed terrestrial species. If it is not possible to effectively implement a particular NNP control project consistent with the Biological Opinion design standards, then a project specific consultation with the USFWS will occur. In no case will a NNP control project that has the potential to affect an ESA listed terrestrial species be implemented without appropriate ESA consultation coverage. As programmatic Biological Opinions are updated, the design standards found in the Biological Opinion will become design features for the NNP control project if it is to be covered by the programmatic consultation process. The current design standards for limiting disturbance to bald eagles, northern spotted owls and marbled murrelets are: a. Bald eagle: For activities that generate noise above the ambient level, or for burning - No activities January 1 to August 31 or November 15 to March 15, within 0.25 mile, or 0.5 mile line-of-sight of an occupied nest or winter roost respectively. b. Spotted owl/Marbled murrelet: 1. From March 1 to September 30 and when within 0.25 mile of unsurveyed

Design Features	Description
	suitable habitat make every effort to schedule activities which generate noise above the ambient level or use fire, outside the owl/murrelet critical breeding seasons (owl: March 1- July 7/ murrelet: April 1 – August 5). 2. If a NNP control project that generates noise above the ambient level or uses fire must be conducted between March 1 to August 5 and is within 300 feet of a known owl/murrelet site or unsurveyed suitable habitat, then restrict the number of projects allowed per resource area, to comply with the potential anticipated disturbance level reported in the Programmatic Biological Assessment that analyzed all projects which might disturb listed wildlife species on federal lands within the Northern Oregon Coast Range. 3. For NNP control activities that use fire or generate noise above the ambient level, done during any part of the murrelet breeding season and in, or within 0.25 mile of, occupied or unsurveyed suitable or potential murrelet habitat, restrict activities to the time period between two hours after sunrise and two hours before sunset, local time. 4. Spotted owl and marbled murrelet seasonal and daily restrictions will not apply to NNP control projects that will occur within campgrounds, picnic areas, trailheads, administrative sites and well-traveled roads ¦ A resource area wildlife biologist will be consulted whenever a NNP control project using fire or mechanical tools that generate noise above the ambient level is within 0.25 mile of mature forest (80+ years) habitat.
Physical Treatments- Prescribed fire- General criteria common to all treatments	¦ All projects will require fisheries review/approval for ESA-EFH compliance. ¦ An experienced fuels technician, soils scientist, and fisheries biologist shall be involved in designing prescribed burn treatments. ¦ Burn plans will be written according to bureau policy and will be in compliance with the Oregon State Implementation Plan and the Oregon Smoke Management Plan to lessen the impact on air quality in designated areas. ¦ Piled material will be allowed to dry thoroughly prior to ignition to promote rapid, clean burning with minimal smoke impacts. In some instances piled materials will be covered with plastic to protect from precipitation while drying. ¦ Slash removal or lop and scatter maybe required to reduce fuel loads required to implement a low to moderate severity burn. ¦ To reduce smoke conflicts in recreation sites and/or designated corridors, consider manual or mechanical means to reduce the amount of non-native vegetation in lieu of burning. ¦ Low severity burns shall constitute the dominant type of controlled burn, resulting in a mosaic pattern of burned and unburned landscape. Low severity burns, as defined in the National Fire Plan (2002), are characterized by the following: low soil heating, or light ground char, occurs where litter is scorched, charred, or consumed, but the duff is left largely intact, although it can be charred on the surface. Woody debris accumulation is partially consumed or charred. Mineral soil is not changed. Fire severity in forest ecosystems is low if the litter and duff layers are scorched but not altered over the entire depth. ¦ Moderate-severity burns are permitted in no more than 20% of the riparian area. Moderate-fire severity, as defined in the National Fire Plan (2002), is characterized by the following: moderate soil heating, or moderate ground char, occurs where the litter on forest sites is consumed and the duff is deeply charred or consumed, but the underlying mineral soil surface is not visibly altered. Light colored ash is present. Woody debris is mostly consumed, except for logs, which are deeply charred.
Physical Treatments- Prescribed fire- Riparian treatments	¦ Ignition can occur anywhere within the riparian area as long as project design criteria are met. ¦ Accumulations of treated non-native vegetation may be hand or machine piled or lopped

Design Features	Description
	and scattered to reduce fuel loads required to implement a low to moderate severity burn. ¦ Avoid creating hydrophobic soils when burning slash piles within the riparian areas adjacent to the stream. Slash piles should be far enough away from the stream channel so any sediment resulting from this action will be less likely to reach the stream. ¦ Chemical fire retardants will not be used within riparian areas.
Biological Control Animal Release	¦ All biological controls used will be U.S. Animal and Plant Health Inspection Service (APHIS) and state approved. ¦ Agents demonstrated to have direct negative effects on non-target organisms will not be released.
Herbicide Treatments- General criteria common to all treatments.	¦ Only BLM approved herbicide glyphosate will be used and only aquatic labeled glyphosate will be utilized in riparian zones. The rate of application will be whichever are less, 1) application rate according to label, or 2) BLM approved rate of active ingredient per acre. ¦ Pesticide Use Proposals (PUPs) will be filled out (and approved) and approved prior to glyphosate use. ¦ Only daily use quantities of herbicides will be transported to the project site. ¦ Herbicide applications will only occur during calm dry weather conditions to prevent drift and runoff; no treatments will occur during rain or high wind (defined as wind velocities greater than 10 mph, or as stated on the herbicide label) events, or if precipitation (including fog drip) has been forecasted within 24 hours of spraying. ¦ Only low to medium pressure sprayers producing droplet sizes between 200 and 800 microns will be used to minimize drift potential. ¦ Nearby landowners will be notified prior to herbicide treatment. If treatments occur within recreational areas, warning signs will be posted to notify the public of herbicide use in the area.
Herbicide Treatments- Certification	¦ Only Oregon certified applicators or individuals under direct supervision of an Oregon certified applicator will apply herbicides in accordance with label instructions and bureau policies. ¦ For knotweed stem-injection, only individuals familiar with proper glyphosate stem-injection methodology will implement treatment. Only aquatic glyphosate formulations will be used.
Herbicide Treatments- Surfactants	¦ Only, LI 700 or Agri-Dex surfactants (both approved for riparian applications) will be approved for use. Application rate will be according to product label. ¦ When consistent with label instructions, use water when diluting herbicides prior to application.
Herbicide Treatments- Riparian applications	¦ Spot spray application of aquatic labeled glyphosate will be allowed to waters edge on projects determined by the fisheries biologist to be 'no effect'. However, application on plants growing in dry portions of a stream channel will be limited to the ODFW preferred in-water work period for each watershed. ¦ For projects determined by the fisheries biologist to be a 'may affect' the following design features apply: 1) Spot spray: i) spot spray of aquatic glyphosate allowed to bankfull level. Hand held spray application (no backpack sprayers) of aquatic glyphosate allowed within intermittent or ephemeral channels, and ii) Hand held spray application (no backpack spray) of aquatic glyphosate to 15 feet of waters' edge in perennial channels. 2) Wicking and Wiping: Application with aquatic glyphosate allowed to the waters edge. 3) Cut-stump and Hack and Squirt: Application with aquatic glyphosate allowed to waters' edge. ¦ Only stem injection and wicking and wiping application with aquatic labeled glyphosate

Design Features	Description
	will be used on emergent vegetation. ¦ No herbicides will be applied to submersed or floating vegetation or open water. ¦ Aquatic glyphosate formulation can be used at up to 100% concentration for the stem injection method. The formulation will be diluted to 50% or less active ingredient when applied directly to fresh stem cuts using wicking/wiping and up to the percentage allowed by label instructions when applied to foliage using low pressure hand-held spot spray applicators.
Herbicide Treatments- Transported volumes	¦ Only daily use quantities of herbicides will be transported to the project site. ¦ For emergent noxious weed infestations which can only be reached by water travel, either by wading or inflatable raft (or kayak), the following measures will be used to reduce spills during water transport: a) No more than 2.5 gallons of glyphosate will be transported per person or raft; typically it will be one gallon or less. b) During transport by raft or boat, glyphosate will be transported in 1 gallon or smaller plastic containers. The containers will be wrapped in plastic bags and then sealed in a dry-bag and secured to the watercraft. ¦ Only experienced boaters will transport herbicides.
Herbicide Treatments- Spills, prevention, storage, and disposal	¦ A spill cleanup kit will be available whenever herbicides are used, transported, or stored. ¦ Equipment cleaning and storage and disposal of rinsates and containers will follow all applicable state and Federal laws. ¦ Areas used for mixing herbicides will be placed where an accidental spill will not run into surface waters or result in groundwater contamination. Impervious material will be placed beneath mixing areas in such a manner as to contain any spills associated with mixing/refilling. ¦ Equipment cleaning and storage and disposal of rinsates and containers will follow all applicable state and Federal laws.
Restoration-	¦ Following successful non-native vegetation control comply with bureau native plant policy in restoration efforts. (see Appendix 7)

Treatment type, restrictions on those treatments, and the number of acres of each treatment type is summarized in Table 3.

Table 3: Summary of Treatments

Treatment Type	Restrictions	Acres Treated
Cultural- Grazing	Fisheries review/approval needed for ESA-EFH compliance. Twenty-five foot minimum buffer required.	Treatment amounts included toward annual 1,500 physical treatment acres.
Biological	Allowed throughout the project area.	Unlimited.
Physical	Allowed throughout the channel as determined by the resource area Fisheries Biologist or Hydrologist.	Up to 1,500 gross treatment acres per year will be treated. No restrictions on the number of treatment acres per 6th field watershed.

Treatment Type	Restrictions	Acres Treated
Herbicide-treatments	On actions determined to be 'no effect' by the fisheries biologist, spot application using aquatic labeled glyphosate will be allowed to waters edge. On actions determined to be 'may affect' by the fisheries biologist, additional application restrictions will apply (see above Table 2). No herbicides will be applied to submersed or floating vegetation or open water.	Glyphosate use will be limited to 100 acres per year within the Westside Salem project area and restricted to whatever is less: 1) 10 acres per year, per 6th field watershed, or 2) less than 10% of the total riparian area within each 6th field per year, excluding those project areas listed in Appendix 6.

III. COMPLIANCE WITH DIRECTION

The analysis documented in the Westside Salem Integrated Non-Native Plant Management Plan EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). This project has been designed to conform to the *Salem District Record of Decision and Resource Management Plan***,** May 1995 (ROD/RMP) and related documents which direct and provide the legal framework for BLM managed lands within the Salem District (EA pp. 1-2). All of the above documents are available for review in the Salem District Office. Additional information about the proposed project is available in the Westside Salem Integrated NNP Management Plan Project EA Analysis File (NEPA file), also available at the Salem District Office.

Survey and Manage Species Review:

The decision is consistent with the Northwest Forest Plan, including all plan amendments in effect on the date of the decision. The Westside Salem Integrated Non-Native Plant Management Plan project conforms with the *2007 Record of Decision To Remove the Survey and Manage Mitigation Measure Standards and Guidelines from Bureau of Land Management Resource Management Plans Within the Range of the Northern Spotted Owl* (July 2007).

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IV. ALTERNATIVES CONSIDERED

Alternatives Considered but Not Analyzed in Detail:

The following action alternatives were evaluated but not included in detailed analysis (EA pp.14 -15):

No Chemical Herbicides Alternative

An alternative of no-chemical use was considered and not analyzed in detail because there are existing NEPA documents for both the MP and Tillamook RAs for the use of physical, biological and cultural control of NNPs. In addition, this alternative would not meet the purpose and need.

Picloram, 2-4 D, and Dicamba Alternative

Another alternative utilizing glyphosate and the additional three BLM approved chemicals, (Picloram, 2-4 D and Dicamba) was considered but not further analyzed due to concerns of toxicity, lack of specific locations identified for use and the additional design features that would have to be built into the EA to analyze for the use of the three additional chemicals. This alternative was needed to provide for 'rapid response' to newly discovered infestations. The IDT disagreed with the argument for the additional evaluation of these toxic chemicals, concluding 'rapid response' did not include initial spraying of picloram, 2-4 D or dicamba. Furthermore, rapid response involves evaluating NNP infestations, reviewing the life cycle of the species and formulating a plan that may or may not include chemical use for eradication of the Oregon State designated noxious weed species. In addition, if a new noxious weed infestation occurred outside of the parameters of this EA, (such as within required buffer distances in riparian areas for other chemicals), additional NEPA (EA or EIS) analysis would have to be completed. It was decided if picloram, 2-4 D or dicamba are needed for treatment of any Oregon State listed noxious weed, a site specific EA or EIS would be completed at that time.

Restricted Backpack Sprayer Alternative

An alternative to restrict the use of backpack sprayers within riparian areas to a distance whichever is greater, 1) within the bankfull channel, or 2) a 15 foot distance from surface water was considered, but not further analyzed. The ID team felt backpack sprayers provide for a more constant pressure resulting in a more constant flow and/or droplet size and would require less re-filling vs. limiting the spray to hand held spray bottles which carry less volume, require constant re-filling and have a more fluctuating droplet size due to rapid loss of spray pressure. Most chemical spills or accidents occur when re-filling, mixing or pouring chemicals. In addition, many of the sites to be treated are in remote locations and the use of backpack sprayers would limit the need to transfer and pour chemicals. The ID team felt utilizing backpack sprayers as a type of spot spray to the waters edge provided for better application and reduced hazardous spills vs. the use of hand held sprayers.

Alternatives Considered in Detail:

The EA analyzed the effects of the proposed action and the no action alternatives. Complete descriptions of the "action" and "no action" alternatives are contained in the EA, pages 5-14.

V. DECISION RATIONALE

Considering public comment, the content of the EA and supporting project record and the management direction contained in the ROD/RMP, we have decided to implement the selected action as described above. The following is our rationale for this decision.

1. The selected action:
   - Meets the purpose and need of the project (EA section 1.5, pages 3-4) as shown below in Table 4.
   - Conforms to all Land use plans, Policies and Programs and related documents which direct and provide the legal framework for BLM managed lands within the Salem District (EA pp. 1-2).
   - Is fully compliant with the *2007 Record of Decision To Remove the Survey and Manage Mitigation Measure Standards and Guidelines from Bureau of Land Management Resource Management Plans Within the Range of the Northern Spotted Owl* (July 2007).
   - Will not have significant impact on the affected elements of the environment beyond those already anticipated and addressed in the RMP/FEIS.
   - Has been adequately analyzed.

2. The No Action alternative was not selected because it does not meet the Purpose and Need directly, or delays the achievement of the Purpose and Need (EA pp. 3-4).

Table 4: Comparison of the Alternatives with Regard to the Purpose of and Need for Action – Project 2

Purpose and Need (EA section 1.5)	***No Action***	***Selected Action***
Apply integrated pest management methods (e.g., chemical, mechanical, manual and/or biological) in accordance with BLM's multistate environmental impact statement for noxious weed control and the related record of decision (ROD/RMP p.64);	Partially fulfills. Marys Peak and Tillamook Resource Areas have control methods available now that do not include chemical application.	Fulfills. Allows use of chemicals as well as other methods to control NNPs.

VI. PUBLIC INVOLVEMENT/CONSULTATION/COORDINATION

Public Scoping and Notification-Tribal Governments, Adjacent Landowners, General Public, State, County and local government offices

A description of the proposal was included in the December 2006, March 2007 and June 2007 Salem Bureau of Land Management Project Update which was mailed to more than 1000 individuals and organizations. A letter asking for scoping input on the proposal was mailed on March 08, 2007 to 79 individuals, groups and agencies that were potentially affected and/or interested in management activities in the resource areas as a whole. A total of one letter was received as a result of this scoping. Responses to these comments can be found in Appendix 2 of the EA (pp. 69-72).

Comment Period and Comments:

The EA and FONSI were made available for public review January 23, 2008. Seventy-nine letters were sent to the same individuals, groups and agencies on the scoping list. The notice for public comment was published in a legal notice by the following newspapers: *Gazette Times,* located in Benton County; *Itemizer Observer* located in Polk County; *Headlight Herald* located in Tillamook County, *News Register* in Yamhill County, *South County Spotlight* in Columbia County, and the *Newport News Times* located in Lincoln County. No comments were received during the 30 day comment period for the EA.

Consultation/Coordination:

U.S. Fish and Wildlife Service

To address concerns for effects to federally listed wildlife species and potential modification of critical habitats, the selected action was consulted upon with the U.S. Fish and Wildlife Service, as required under Section 7 of the Endangered Species Act. Consultation for this selected action was facilitated by its inclusion within a programmatic Biological Assessment (USDA-FS and USDI-BLM 2005) that analyzed all projects which might disturb listed wildlife species on federal lands within the Northern Oregon Coast Range during fiscal years 2006 and 2007. The resulting Biological Opinion (FWS Reference Number 1-7-05-F-0664) concluded that this action is not likely to jeopardize the continued existence of the northern spotted owl, marbled murrelet, or bald eagle. This selected action has been developed to incorporate all appropriate design standards set forth in the Biological Opinion to minimize impacts to listed species. Inclusion of this action (described in the BA/BO process as "invasive plant control") in all future programmatic consultations on disturbance will ensure that this program has met the requirements under Section 7 of the Endangered Species Act.

National Marine Fisheries Service

Consultation with NOAA- NMFS is required for projects that 'May Affect' listed species. The selected action associated with the Westside Salem Integrated NNP Management Plan Project may affect listed fish or listed critical habitat in the MP and Tillamook RAs. A determination has been made that the proposed project, specifically those actions within the riparian area associated with salmon habitat, will 'Adversely Affect' EFH (Essential Fish Habitat) within the affected watersheds.

Given the programmatic nature of the proposed activities, and extensive geographic coverage, it is likely that circumstances will arise where treatment of invasive plant infestations will occur within perennial, intermittent, or ephemeral channels tributary to streams with ESA listed fish and their designated critical habitat. Since instream herbicide concentrations are difficult to quantify in absence of site specific analysis, potentially high runoff may occur in some situations but cannot currently be calculated (due to unknown site conditions). For this reason a may affect 'Likely to Adversely Affect' determination is warranted for ESA-listed fish species and for the listed critical habitat.

Protection of EFH as described by the MSA (Magnuson/Stevens Fisheries Conservation and Management Act) and consultation with NOAA-NMFS is required for all projects which may adversely affect EFH. For purposes of this assessment habitat harboring salmon species (Chinook, coho, and chum salmon) are considered EFH. The proposed Westside Salem Integrated NNP Management Plan project may affect EFH due to activities associated with the Westside Salem

Integrated NNP Management Plan project from occupied habitat.

The selected action will meet the Project Design Criteria established in the Biological Assessment (BA) for USDA Forest Service (Pacific Northwest Region), USDI Bureau of Land Management (Oregon State Office), and the Coquille Indian Tribe Fish Habitat Restoration Activities Affecting ESA and MSA-Listed Animal and Plants Species Found in Oregon and Washington (December 12, 2006). On April 28, 2007, NOAA - NMFS completed their Biological Opinion (BO) Endangered Species Act Section 7 Formal Programmatic Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-CY2012, which included NNP treatments. Adverse effects to ESA-listed species and EFH and application of design features to minimize effects are covered by the Programmatic BO. Conformance with the design criteria established in the NOAA NMFS BO will result in no additional consultation needs to implement the proposed activities. Any activities not covered by the Programmatic BO which "may affect" listed species will be consulted on separately. The USDA/USDI/Coquille programmatic BA included design criteria not included in the NOAA NMFS BO. Application of herbicide using spot spray to emergent non-native vegetation within perennial waters or other spot spraying closer than 15 feet from the water edge or backpack spraying within intermittent or ephemeral channels as described in this assessment will need consultation coverage not currently covered in the NOAA NMFS BO.

Review of Aquatic Conservation Strategy Compliance:

I have reviewed this analysis and have determined that the project meets the Aquatic Conservation Strategy in the context of PCFFA IV and PCFFA II [complies with the ACS on the project (site) scale]. Table 5 describes how this project complies with the four components of the Aquatic Conservation Strategy, originally documented in the EA, Section 4.

Table 5: Compliance with Components of the Aquatic Conservation Strategy

ACS Component	Project Consistency
Component 1 - Riparian Reserves	Riparian Reserve boundaries will be established with direction from the RMP. Infestations of NNPs can de-stabilize streambanks, increase sediment, and increase water temperature, and could be prevented or ameliorated by actions in this project. By maintaining or restoring the native species composition and structural diversity of plant communities in riparian areas and wetlands, riparian functions will be protected. The project meets ACS objective of maintaining and restoring well-distributed populations of native plants, supporting invertebrate and vertebrate riparian-dependant species. Water quality will be maintained by adherence to project design features that control conditions, timing and buffer widths for treatments. In riparian zones, only Glyphosate formulation labeled for aquatic use will be allowed.

ACS Component	Project Consistency
Component 2 - Key Watershed	Treatments could occur in Key Watersheds, but will only occur where watershed analysis is completed. Project objectives are consistent with Key Watershed objectives of maintaining salmonid habitat and providing high quality water. In addition, maintaining native plant communities contributes to habitat integrity and healthy riparian function. Watershed restoration, which includes native species restoration, is a priority in Key Watersheds. Water quality will be maintained by adherence to project design features. Key watersheds that occur within the project area according to the 2002 REO GIS database include the following Tier 1 key watersheds; Cummins/Tenmile/Rock/Big Creek (coast), Drift Creek (Alsea), Drift Creek (Siletz), Elkhorn Creek (Trask), Kilchis River, Little North Fork Wilson River, Mill Creek, North Fork Beaver (coast), North Fork Siletz River, Salmon River, Tobe Creek, Upper Lobster Creek, Upper Nestucca River, and Yachats. They are no Tier 2 Key Watersheds located within the project area.
Component 3 - Watershed Analysis	The project is consistent with the recommendations in numerous watershed analyses which recommend inventory and control of NNPs.
Component 4 - Watershed Restoration	Control of NNPs is consistent with restoration objectives of recovery of riparian and fish habitat and water quality. Control of NNPs on BLM managed lands reduce downstream spread, contributing to watershed health.

In addition, I have reviewed this project against the ACS objectives at the project or site scale with the following results: The no action alternative does not retard or prevent the attainment of any of the nine ACS objectives because this alternative would maintain current conditions. The selected action does not retard or prevent the attainment of any of the nine ACS objectives (Table 6).

Table 6: Project's Consistency with the Nine Aquatic Conservation Strategy Objectives

Aquatic Conservation Strategy Objectives (ACSO)	Project 1 - Alternative 2 (EA Section 9.1.1)
1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features.	Does not prevent the attainment of ACSO 1. The removal and/or control of NNP species under Alternative 1 will help ensure that the lands are managed in compliance with the ACS objectives. The riparian and wetland habitat on the lands will be protected from non-native species, which will encourage a diversity of native species. This will contribute toward maintaining and restoring the complexity of aquatic systems.
2. Maintain and restore spatial and temporal connectivity within and between watersheds.	Does not prevent the attainment of ACSO 2. The integrated weed management program as outlined in Alternative 2 will begin to restore some of the wetlands, floodplains and uplands. Species such as Japanese knotweed can quickly take over riparian sites and crowd out native species destroying any connecting habitats. By controlling species, connecting habitats are restored and managed under ACS objectives.
3. Maintain and restore the physical	Does not prevent the attainment of ACSO 3. Most non-native

Aquatic Conservation Strategy Objectives (ACSO)	Project 1 - Alternative 2 (EA Section 9.1.1)
integrity of the aquatic system, including shorelines, banks, and bottom configurations.	species are not known for their soil stabilizing ability nor do they provide the habitat needed for floodplains. Native species that have adapted over the years to the streams and river ecology will most likely provide greater protection to the shoreline and banks. This NNP management plan will restore native species that historically occurred within riparian systems that are currently occupied by NNP species. The restoration of such species will improve the physical integrity of the aquatic system.
4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems.	Does not prevent the attainment of ACSO 4. As discussed above, the integrated non-native species management plan will increase the amount of native riparian and wetland habitats managed for ACS objectives and contribute toward meeting this objective especially with restoration efforts on the disturbed lands. Site level effects to water quality are expected from the selected action in the short term (1-2 years) due to removal of NNP and exposure of mineral soil. Over the long term, water quality will be expected to improve at the local and 5^{th} field scale due to restoration of native vegetation and natural processes.
5. Maintain and restore the sediment regime under which aquatic ecosystems evolved.	Does not prevent the attainment of ACSO 5. Changes in the sediment regime could occur if non-native species were allowed to become the dominant species. In the short-term (1-2 years) very local sediment levels may be affected due to removal of NNP and exposure of mineral soil. Over the long term, by controlling or eradicating non-native species, native species are more likely to maintain and restore the sediment regime, because they have adapted to variable water flows.
6. Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing.	Does not prevent the attainment of ACSO 6. An integrated non-native species management program will work to maintain and restore natural in-stream flows by providing native vegetation along riparian areas, which have adapted to high and low flow regimes. NNP are unlikely to influence peak flow due to evapotranspiration. Under this action, no canopy alteration of size sufficient to alter flow will occur.
7. Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands.	Does not prevent the attainment of ACSO 7. Floodplains and meadows that have non-native weed species should be prioritized for management action. Inundation of these habitats could assist in propagation of non-native species downstream. It is possible that NNP will alter channel profile by altering sediment capture, if so the proposed management action will help maintain and restore this objective. If NNP do not alter channel profile, this action will have little effect on floodplain inundation and water table elevation.
8. Maintain and restore the species	Does not prevent the attainment of ACSO 8. Integrated non-

Aquatic Conservation Strategy Objectives (ACSO)	Project 1 - Alternative 2 (EA Section 9.1.1)
composition and structural diversity of plant communities in riparian areas and wetlands.	native species management will help restore diversity of plant communities by allowing native species to repopulate sites. Native species are adapted to the conditions and ecological processes in riparian areas and wetlands.
9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species.	Does not prevent the attainment of ACSO 9. Non-native weed species tend to create monocultures and crowd out native species. Using an integrated management approach and eradicating populations of NNP species can accomplish an effective and successful restoration effort.

VII. CONCLUSION

Review of Finding of No Significant Impact

We have determined that change to the FONSI (March 2008) covering the Westside Salem Integrated Non-Native Plant Management Plan is not necessary because we've considered and concur with information in the EA/FONSI and this DR. No new information was provided that lead us to believe the analysis, data or conclusions are in error or that the selected action needs to be altered. The selected action will not have effects beyond those already anticipated and addressed in the RMP/FEIS.

Supplemental or additional information to the analysis in the RMP/FEIS in the form of a new environmental impact statement is not needed for the reasons described in the FONSI, pages ii-iv).

Administrative Review Opportunities

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management Regulations at 43 CFR 5003, protests of this decision may be made within 15 days of the publication of a notice of decision in a newspaper of general circulation. This notice of decision will be published in the *Gazette Times*, located in Benton County; *Itemizer Observer* located in Polk County; *Headlight Herald* located in Tillamook County, *News Register* in Yamhill County, *South County Spotlight* in Columbia County, and the *Newport News Times* located in Lincoln County newspapers on or around April 16, 2008. To protest this decision a person must submit a written protest to Trish Wilson, Marys Peak Resource Area Field Manager, 1717 Fabry Rd. S.E., Salem Oregon 97306 by the close of business (4:30 p.m.) on May 1, 2008. The protest must clearly and concisely state the reasons why the decision is believed to be in error.

Implementation Date

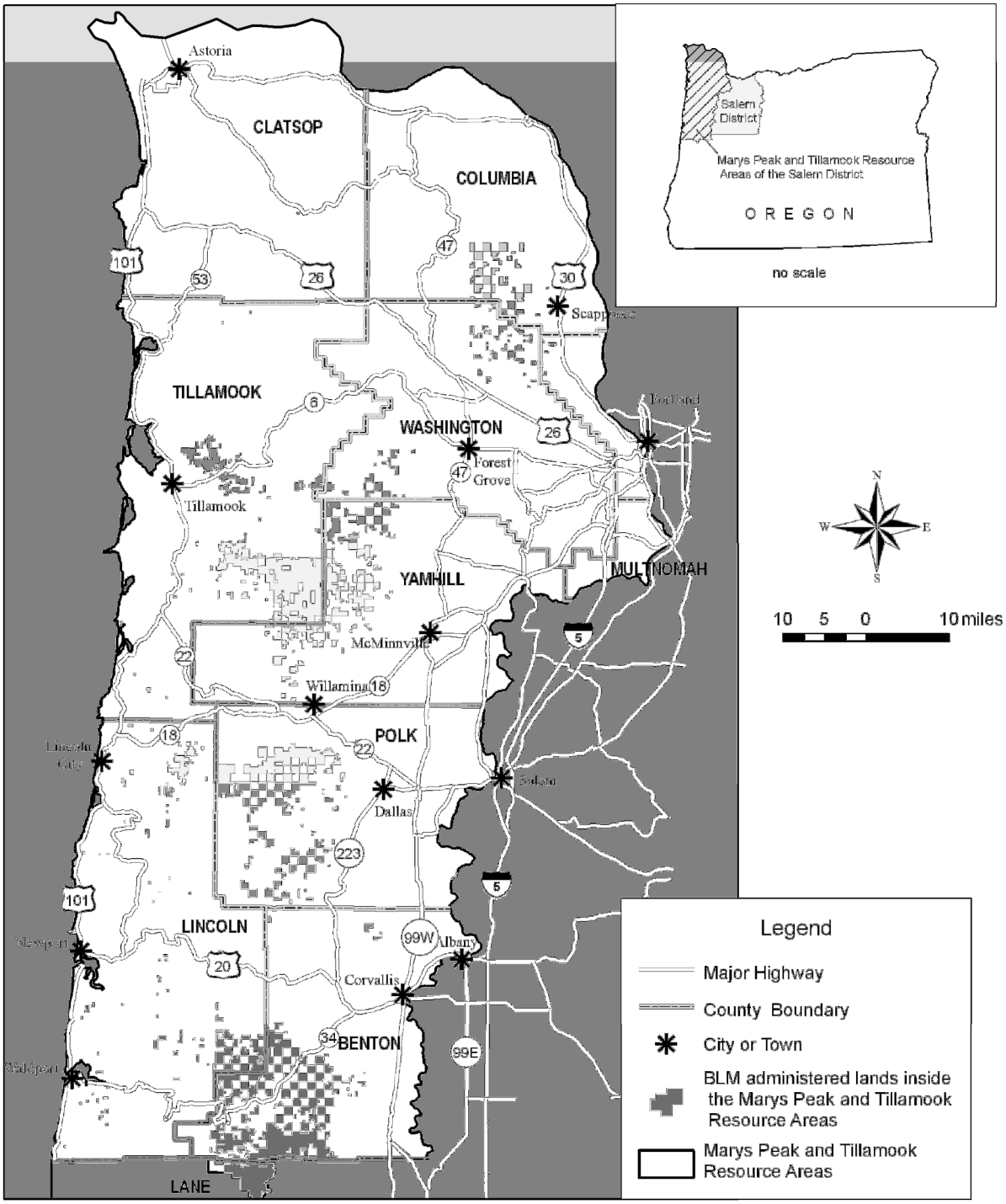
If no protest is received within 15 days after publication of this DR, this decision will become final. For additional information, contact Bob McDonald (503) 815-1110, Tillamook RA, 4610 Third Street, P.O. Box 404, Tillamook, OR 97141, or Gary Humbard (503) 315-5981, Marys Peak RA, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by: Trish Wilson 4/10/08

Trish Wilson
Marys Peak Resource Area Field Manager
Date

William B. Keller
Tillamook Resource Area Field Manager
April 10, '08
Date

Integrated Non-Native Plant Management Plan



No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data. Original data was compiled from multiple source data and may not meet U.S. National Mapping Accuracy Standard of the Office of Managment and Budget.

March 1, 2007